What Is Claimed Is:

1. A rangefinder apparatus comprising:

AF data generating means for forming an image of light from an object to be subjected to rangefinding onto a pair of line sensors each including a plurality of light-receiving elements, and generating AF data for computing a correlation value according to signals obtained from the light-receiving elements;

AF data acquiring means for acquiring the AF data from a pair of employed sensor areas used for rangefinding in the pair of line sensors;

correlation value computing means for determining a pair of window areas for selecting the AF data to be used for computing the correlation value within the pair of employed sensor areas, and successively computing correlation values while shifting the pair of window areas;

interpolated correlation extreme value computing means for detecting a correlation extreme value(s) among the correlation values computed by the correlation value computing means, and interpolating thus detected correlation extreme value(s) so as to compute an interpolated correlation extreme value(s);

highest correlation value detecting means for detecting as a highest correlation value the interpolated correlation extreme value exhibiting the highest correlation among the interpolated correlation extreme

value(s);

shift amount computing means for computing a shift amount of the window areas yielding the highest correlation value; and

object distance calculating means for calculating a distance to the object according to the shift amount computed by the shift amount computing means.

2. The rangefinder apparatus according to claim 1, further comprising oscillation degree calculating means for calculating a value indicative of an oscillation degree of the AF data;

the interpolated correlation extreme value computing means computing the interpolated correlation extreme value(s) on the condition that the value indicative of the oscillation degree calculated by the oscillation degree calculating means is greater than a predetermined reference value; and

the highest correlation value detecting means detecting the highest correlation value from the correlation extreme value(s) that is not interpolated when the value indicative of the oscillation degree calculated by the oscillation degree calculating means is at or smaller than a predetermined reference value.

3. The rangefinder apparatus according to claim 1, further comprising comparing means for detecting a first correlation extreme value exhibiting the highest

correlation and a second correlation extreme value exhibiting the second highest correlation in the correlation extreme values that are not interpolated, and judging whether a difference between the first correlation extreme value and the second correlation extreme value normalized by the first correlation extreme value is adequately large by comparing a ratio of the second correlation extreme value to the first correlation extreme value with a predetermined reference value;

the interpolated correlation extreme value computing means computing the interpolated correlation extreme value(s) on the condition that the comparing means judges that the difference is not adequately large ; and

the highest correlation value detecting means detecting the highest correlation value from the correlation extreme value(s) that is not interpolated when the comparing means judges that the difference is adequately large.

4. The rangefinder apparatus according to claim 1, further comprising first determining means for determining the validity of the interpolated correlation extreme value(s) computed by the interpolated correlation extreme value computing means;

the highest correlation value detecting means detecting the highest correlation value from the correlation extreme value(s) that is not interpolated when the first determining means determines that the interpolated

correlation extreme value(s) is invalid.

5. The rangefinder apparatus according to claim 1, further comprising second determining means for determining the capability to calculate the distance to the object by comparing the difference between a first interpolated correlation extreme value exhibiting the highest correlation and a second interpolated correlation extreme value exhibiting the second highest correlation in the interpolated correlation extreme values computed by the interpolated correlation extreme value computing means with a predetermined reference value.

6. The rangefinder apparatus according to claim 5, wherein the second determining means changes the predetermined reference value according to the first interpolated correlation extreme value.

7. The rangefinder apparatus according to claim 1, wherein the shift amount of the window areas yielding the highest correlation value based on the interpolated correlation extreme value(s) is computed using an arithmetic expression that is used in computing the interpolated correlation extreme value(s).

8. A camera comprising the rangefinder apparatus according to claim 1.